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ABSTRACT

Research in classrooms must be sensitive to new dimensions of teaching tasks that emerge at the group level. There are at least two tasks that can be identified as being affected by changes in group characteristics. The first task is to set the stage--the teacher must establish the proper context or setting to support academic activities. The second task is to instruct. The data reported here is from a subsample of 16 junior high school mathematics and English classes. The classes were categorized into three groups--extremely heterogeneous, homogeneous with high ability, and homogeneous with low ability. The heterogeneous classes pose problems because teachers must plan and execute instructions so that all students are provided with a focus for their behavior throughout the class or period while the teacher must differentiate instruction to meet widely differing needs. In the high ability group, the teacher must use group characteristics to maximize the amount of academically engaged time while minimizing the intrusion of the needs for social organization. The low ability group poses serious problems both in setting the stage and in instructing. Teachers often accept less desirable forms of participation in an attempt to maintain some student involvement in classroom activities. (Author/IRT)

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The Tasks of Teaching Classes of Varied Group Composition

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The Tasks of Teaching Classes of Varied Group Composition

As teachers acquire experience over the years, they also acquire a sense of the differences in kinds of classes. With this sense that classes themselves differ (based on student composition and associated characteristics), there is the knowledge that teaching must take varied forms. Because of these varieties of group composition, no one set of tried and true strategies may be expected to work across settings. Inquiry is needed into this relationship if we hope to prepare teachers adequately, rather than abandoning them to the lengthy and uncertain process of learning from experience.

Research in classrooms must be sensitive to the emergence at the group level of new dimensions of teaching tasks. Teachers are certainly confronted with students with individual needs and learning problems. This fact has long been the basis for an accepted approach to thinking about teaching tasks. But while the authors are not questioning the value of this approach, they are suggesting that it only captures a portion of teaching tasks -- tasks which are, in a sense, secondary. In the standard classroom, the teacher is facing a group, as well as individual students. Dealing with the group is not a variation and derivative of dealing with individual students; interacting successfully with a group of students presents some fundamentally different demands. Strategies for interacting with students on an individual level are often secondary to the teacher's need to deal with the group as a whole and to behaviorally organize that group successfully.

In sum, teaching tasks with respect to the group cannot be reduced to teaching tasks on an individual level. Problems relevant to the

accomplishment of teaching tasks may emerge only at the group level. Such problems may interact with and be related to individual learning difficulties, but they are different and cannot be treated in the same way.

Increasing understanding of how group properties and related classroom features impact upon the accomplishment of teaching tasks may more closely reflect the priorities of teacher thinking, and some researchers (Doyle, 1978, and Copeland, 1980, among others) have drawn attention to the need for this kind of inquiry. Individualization of instruction may be the goal of the teacher, but it can only be reached through successful handling of problems at the group level. "Optimal instruction" may in large part be optimal group instruction.

What are the teaching tasks which are affected by changes in group characteristics? Given the ordinary classroom as a context, there are at least two tasks which can be identified or distinguished. (Other "tasks" can also be defined, but many of these are instrumental to the accomplishment of the two major ones referred to here.) The first involves "setting the stage." The teacher must establish the proper context or setting which will support the academic activity. Many researchers have approached this in terms of supplying a suitable "classroom environment." Not only must a teacher "set the stage," but this setting must also be maintained. Hence, the teacher must attend and respond to events which either undermine or support this environment. Continuing to ensure that the stage remains set is frequently more demanding than initially setting the stage. Second, in addition to setting the right scene and getting the students ready to learn, the teacher must instruct. Whereas setting the stage imposes

certain managerial needs for social organization, instruction also requires management and organization. Instruction must be organized with respect to the forms of both teacher and student participation and must be sensitive to student abilities.

The following paper attempts to describe several kinds of classrooms which were identified from a large study of classroom organization and management in junior high school (Evertson, Emmer, & Clements, Note 1). In addition to describing these types of classrooms, some attention will be given to the variations in teachers' tasks as they cope with groups of differing composition.

Methodology

Description of Data Sources

In the full study, year-long observations were made in two classes each of 26 mathematics teachers and 25 English teachers in the 11 junior high schools in an urban school district in the Southwest. The teachers for the study were randomly selected after stratifying by subject taught and years of prior teaching experience. At the beginning of the year, each teacher was observed in one class on the first, second, and fourth class day, and three or four more times during the second and third weeks of class. Each teacher was also observed on four or five occasions in a second class: most of those observations were made in the second and third weeks. During the remainder of the school year, each teacher was observed once in each class every 3 to 4 weeks. There were approximately 18-20 hours of observation completed in each class.

Training for 18 observers was conducted for 1 week prior to the beginning of the year. Observers included project staff with experience in classroom data collection and graduate students who had extensive

relevant experience in classrooms (e.g., as student teacher supervisors). Observation data were obtained using several procedures providing broad assessment and description of classroom behaviors and activities. There were several data sources in the study. Those relevant for this paper are the following:

Classroom narrative records. During each observation observers made extensive notes describing in sequence the events during the period. The focus for the notes was on management related activities, teachers' control of classroom behavior, instructional leadership, room arrangement, peer interaction, and teacher-student interaction. A set of 42 guideline questions was used to standardize the narrative records. Using their notes to stimulate recall, observers dictated a record of each observation onto audiocassettes. These tapes were transcribed producing a file of typed descriptions for each observed class. Typically, a narrative record for a single period consists of seven to 10 pages of description. When read as a set for a given class, the narratives yield a detailed chronology of classroom events. Information for this paper comes chiefly from this data source.

Student Engagement Rates (SER). These are frequency counts of students. Beginning at a randomly determined minute in the initial 10 minutes of each period and, thereafter, every 15 minutes, observers classified students according to their individual level of activity. The categories included on-task or off-task (definitely or probably), in academic or in procedural activities, and dead time (no specified activity, waiting). SERs were converted to proportions and averaged within periods, producing an estimate of on- or off-task rates for each class session.

Student data. California Achievement Test (CAT) scores obtained from the school district during its annual testing program were used for two purposes. First, class means were computed and used to stratify the sample on the basis of entering achievement levels. Second, the class means were used as a predictor when computing residual achievement. Project staff constructed and administered achievement tests in mathematics and in English in early May.

Other Information on the Data Sources

Reliability checks of the observation variables were performed using both between-observer agreement and between-period stability coefficients. Variables reported in this paper were identified as reliable using intra-class correlations at a statistically significant level ($p < .05$) for between-observer reliability check and/or between-period stability. In a few cases, variables did not have adequate range in the between observer checks; however, adequate between-period stability indicated they were being accurately assessed.

The reliability of the achievement and attitude measures was determined using internal consistency coefficients. Both the pilot testing and the study data indicated high reliability of these measures. Residual achievement scores were moderately stable across classes, within teachers.

Selection of Classes

The selection of classes used in this report was governed by the following considerations. First, although there were quantitative measures which would differentiate among and characterize these junior high classes such as student attitudes (as expressed in student ratings of the teacher) and residual achievement gains, these were measures

which were likely to reflect the relative success or failure of teachers in meeting task demands, rather than being reflective of initial group composition differences. Because our concern was to identify teaching tasks, rather than more or less effective responses to them, the use of these and similar measures to define the sample for analysis was less appropriate.

Second, it was felt that while other criteria, such as willingness to cooperate, were more appropriate for our purposes than student attitudes or achievement, they might define a sample less illuminating than more fundamental factors such as the variation in ability within the class and mean ability level. The difficulty of disentangling such criteria from factors such as ability level and developing a precise index, coupled with the corresponding abstraction from other important features, made it seem likely that the effort would not be worthwhile.

Third, our own past research (Evertson, in press) suggested that relative heterogeneity or homogeneity and the mean ability level of the class frequently functioned as "carriers" of other numerous classroom variables relevant to teaching tasks; changes in these two dimensions frequently produced changes in these other features. The associated features which differ with variations in these two dimensions, such as the degree of cooperation, task orientation, nature and form of student participation in activities, the amount and kind of inappropriate behavior, the pace of activity flow, and so on, provide certain concrete terms for exploring the changes in teaching tasks with changes in the group characteristics under consideration.

Finally, the recognition that there are other factors which mediate the effects of heterogeneity/homogeneity with respect to ability and

mean class ability suggested that the features used to distinguish the types of classes discussed in this paper may not be related to changes in the two dimensions in a continuous way; changes in the two dimensions may not always be accompanied by changes in the difficulties or problems associated with the accomplishment of teaching tasks. Significant changes in the demands of accomplishing teaching tasks may occur only at certain points or thresholds. Because we were interested not in the rate with which teaching tasks change with change in these two dimensions, but in seeing how this change as a general tendency could affect teaching tasks, the decision was made to focus on the extremes of these dimensions (approximately one or more standard deviations from the mean of the entire sample on each dimension). Thus, the types discussed in this paper should be thought of as characterizations to which actual classes are likely to correspond more or less closely. In our effort to get a clear picture of the teaching tasks which generally face teachers when confronted with these types of groups, the analysis of the data was conducted with awareness of the need to be sensitive to the special effects that could result from unusually poor management skills. Our interest is in how group characteristics can impact upon teaching tasks, not how teachers can add to their own difficulties.

This paper presents narrative data from a subsample of 16 math and English classes chosen because of their relative homogeneity versus heterogeneity and mean academic ability level of students within the classes. These classes were categorized into three groups with respect to the distribution of academic ability within classes: (a) the extremely heterogeneous class, (b) the homogeneous high ability class and (c) the homogeneous low ability class. Heterogeneous classes were

those in which the range of student ability was an average of eight grade levels. Student ability in homogeneous classes varied an average of three grade levels. Classes whose mean entering ability levels were as high as two or more grade levels above their present grade level were defined as high ability, while classes whose mean entering ability level was as much as three grade levels below their present one were defined as low ability. All the heterogeneous classes had mean ability levels at or above the appropriate grade level for the class. Other classes were excluded from the sample because of insufficient narrative data.

Scores used in sample selection and other quantitative data from these classes are presented in Table 1.

Insert Table 1 about here

The Extremely Heterogeneous Class

The extremely heterogeneous class presents problems for teaching in two important areas.

1. Teachers must plan and execute instruction so that students are provided with a focus for their behavior throughout the class period. In this kind of class, students of varying ability are finishing activities at various times, and the teacher must be particularly sensitive to making sure that students have an appropriate focus for their behavior. When such a focus is not provided, inappropriate or even disruptive behavior often results. This generally impacts negatively on instruction, such as the following vignette indicates.

Case Study A

One of the girls who has already been to the book rack once goes back a second time, and she and Chris stay

there looking at and occasionally sharing books silently. The teacher says, "If you all are finished you may certainly get something to read or work on some other work, but I don't think that you should be talking unless you have finished." Jimmy and Larry are not finished. They have no work to finish. Jimmy hits Larry playfully; they're looking around at the teacher. Clark, sitting near them, is also idle. They talk in whispers. Tracy and her friend have finished and are talking. The teacher says, "Are you finished, Tracy?" Tracy nods. The teacher says, "Then, not so loud, please. There are people around who have not finished." About half of the class is finished and they are talking. The teacher says, "I'm hearing too much talking. Find something to do. Write a letter. Just don't talk. You don't have much time. People are still working." The students continue to talk quietly. The noise level is low, but students near the observer are giddy and horsing around. Tracy is teasing. She slaps her friend. Someone says, "Stop that prissing around." There are giggles. Larry and the girl in the pink blouse are flirting with each other. Larry has changed places with Jimmy to be closer to the girl in the pink blouse, whom he is teasing. Then he moves across the aisle to sit behind her. She says, "You better get away from me, Larry." Larry goes back to his desk, then moves back to her row, and she moves over one. Then she moves back to her desk. The teacher stands up and says, "People, I'm still telling you something and you're not listening." The teacher goes on to repeat that the assignment is due Friday. (Teacher 06, Period 05)

When the absence of a behavioral focus does not lead to inappropriate or disruptive behavior, it can lead to "dead" or unproductive time as in the following:

Case Study B

Most of the students are quietly making corrections. Bobby appears to need to do only one, which he finishes. Then

he goes back to his seat. Some of the students appear to be sitting in dead time, finished with their spelling exercises, as well as their spelling corrections. The expected thing for them to do at this point is to get a book and read. Some of them sit and do nothing. (Teacher 26, Period 01)

Case Study C

About ten students now appear to be in dead time, just sitting quietly waiting for the other students to finish. They have all put their tests on the corner of their desks as they were directed. A few are reading books. The girls finish and return to their desks. The teacher is standing at the front of the room, watching the clock. The teacher says, "Those of you who are finished and working on something different, will you please put that something different up. It's about time to grade the tests." (Teacher 03, Period 05)

2. The teacher must differentiate the instruction to meet the needs of students with a wide, varying range of abilities. In order to do this, the teacher must be skilled in orchestrating the flow of several activities simultaneously. The greater the heterogeneity of the class, the more inevitable some small group instruction becomes. From the standpoint of teaching tasks, this imposes new demands upon the teacher. Instructional planning needs are increased and the teacher must maintain the involvement of students in different activities, which imposes demands upon monitoring skills. An additional consequence is that the teacher may frequently experience a conflict between organizational needs and meeting student needs.

Case Study D

The teacher says, "Okay, for the remainder of the period I will be giving spelling tests to various groups.

Remember that you have to write a half-page in your journal. You have no time limit. You just have to write as long as it takes you to write a half-page on this topic. . . . Please remember that there is no talking as long as I am giving tests." The teacher goes to her desk. There is some talking or whispering at the back of the room around Jennifer G. and Barbara C. The teacher says to them in a quiet voice, "My patience with this area of the room (she motions with her hand) is about gone." Then the teacher gets up and goes over to the Purple group. The teacher says, "Okay, Purple group, it's time for your test." The teacher begins calling out words on the test. After a few she says, "Raymond, what letter should all the words end with?" Raymond says, "E." The teacher repeats, "E." The teacher talks in whispers to this group of three. The rest of the students are very quiet; however, there is still some talk from the group in back which the teacher admonished once. She stops dictating the test and says, "People in the back, cooperation would be very much appreciated." They get quiet, but then Jennifer G. starts whispering again. The teacher continues with the Purple group. After she has said the last word she says, "Okay, look back for that 'E' at the end of every word." She quickly takes up the papers. Robert says, "I think I got them all right, Miss, check mine now." The teacher says, "Okay, I've got other people to give tests to now. I'll check it as soon as I can, Robert." She goes to the Red group, and she starts their test immediately. There are three people in the Red group. After finishing giving the test to the Red group, the teacher says, "Okay, people who are taking the book test, if you have something on your desk with words on it, like your journal or your book, please turn it over or put it under your desk." Travis asks the teacher a question. She tells Travis, "As soon as I get through with this, I will." She begins calling the words. Other students are writing or reading their books. The Purple group is writing. After the teacher

finishes giving the test to this group, she says, "Please pass your papers to _____ in this section and to _____ in this section." Then she says to the whole class, "Only three at a time, but when you are through with your journals, you may walk up here and put them on the shelf. But if you see several people up, please wait until later." The teacher goes to the Blue group and she says to the whole class, "There is a spelling test going on, so please be quiet." The students are putting up their journals as she directed: Only a few at a time. There is a little bit of whispering at this point, to stop it, she makes this comment about the spelling test. She gives the spelling test to the Blue group. [There are three students in this group.] (Teacher 03, Period 05)

Here one sees how grouping for instruction can interact with other features of the heterogeneous classroom to produce obstacles to the accomplishment of teaching tasks. The teacher must simultaneously instruct one small group, while controlling inappropriate behavior from other students and maintaining task-orientation of other students involved in other activities. The demands of maintaining the flow of several activities requires the teacher to postpone responding to a student's request.

The Homogeneous High-ability Class

In the homogeneous high-ability class, the narrative records indicate that students get started more quickly at the beginning of class on academic activities. They have a greater involvement in the academic activities and are able to maintain their involvement over longer periods of time. They participate to a greater degree in activities and display greater interest and motivation. This is reflected in the fact that transitions between activities tend to be shorter. Because of the generally higher task orientation of the

students, the interchanges among the students are more likely to be of an academic nature. Consequently, peer help is likely to be more successful and not degenerate into off-task or disruptive behavior.

With respect to teaching tasks, first, setting the stage is more easily accomplished in this class, reflecting the greater willingness of the students to cooperate as the following vignette illustrates.

Case Study E

> Students come into the class. The teacher talks to some of the students as they come in. The students go directly to their seats when they come in. There is some talking, but it's not too loud. The teacher says, "Okay, let's get out your homework while we wait for the bell. We have a lot to do." The bell rings. The students are already working. The teacher tells one student, "See if you can create an atmosphere with words the same way that an artist creates an atmosphere on canvas." The teacher points to the picture. The students have already gone to work, so apparently they have already been given this assignment yesterday or the day before. (Teacher 40, Period 04)

Another example of this is shown in the following case study.

Case Study F

> The bell rings at 10:50, and the students pass out the papers. The class is quiet. The teacher says in a soft voice, "While the papers are being returned, please get out your homework so we can get started when they are finished." The teacher uses this transition time to review compound and complex sentences by asking individual students leading questions, such as, "What are dependent clauses? What are subordinate clauses? What are conjunctions? What are independent clauses? Why?" This is all being done while the papers are being passed out, so there is no wasted time.

> Students raise their hands, eager to participate in the question and answer session. (Teacher 38, Period 03)

Students in this kind of class get on task more quickly than their counterparts in the homogeneous low-ability class, and the teacher need not devote as much energy to deflecting the various task-avoidance behaviors of students.

Second, the higher task-orientation of the students has consequences for teaching tasks at the instructional level: (a) the students are able to tolerate a higher density of instruction; (b) the students generally have a higher level of frustration, maintaining involvement in an activity at low success rates for a longer time than the student in the homogeneous low-ability classroom; (c) the students are able to work on their own more successfully.

Case Study G

> The teacher is explaining this in very, very detailed language. He repeats things over and over again, not in a boring way, but repetition for the sake of remembering, not just repetition for the sake of repetition. He gives examples on the board of some other problems that are like these. He speaks very rapidly, and one has to really concentrate to keep up with him. The teacher is now calling for the intersections of various lines in the students books. At this point he is asking if two lines are colinear. The student says, "Yes." The teacher asks, "Why?" The student says, "Because they are between." The teacher says, "Right," and goes on with a very rapid explanation of colinear lines. Observer at this point could not keep up with the teacher because he was talking so rapidly. The teacher asks, "Are there any questions on this worksheet, including lines and line segments?" There were no questions. The teacher says, "Put your work away and get out your notes." The students do this without talking from the

teacher. The teacher says, "All right, page 5, 'Notes'." The teacher goes to his desk to get out tennis balls that are on strings. The teacher is now explaining something about line segment "AB" and "CP" as the subset of the plane. "The center points refer to the subset of the plane "P"; it's not an element, but it's a subset. That's a good point for you to bring out." The students are quiet as they follow along, and they seem to be attentive to the teacher during his discussion. The teacher says, "Okay, everybody understand that?" Apparently, the class did; there were nods, yes. The teacher says, "That will come up. In fact, it will be on tonight's homework." The teacher says, "Okay, let's read the next section of notes." The teacher reads quickly. (Teacher 43, Period 06)

What is particularly striking in this vignette is that the students accept a high instructional pace without noticeable loss in task-orientation or involvement -- a feature which is generally characteristic of homogeneous high-ability classes, in contrast with homogeneous low-ability classes.

In addition to this, the students also exhibit a relatively high amount of interest in participating in academic activities, as the following illustrates.

Case Study H

The teacher and the students are talking about the diagrams that they have put on the board. The students are curious about the concepts. They seem to be anxious to learn. They ask questions, as well as answer questions. They are quick to answer questions and many times they raise their hands. (Teacher 43, Period 06)

The generally higher task orientation and motivation and interest are probably contributory to the greater ability of the homogeneous

high-ability students to work alone for extended periods when the assignment is not especially demanding, as we see in the following.

Case Study I

> The students are working hard and are quiet. The teacher is walking around helping students. All the students are working intently, believe it or not. At 3:15 all the students are still working hard. The teacher is at his desk looking at some graded papers. At 3:17 three hands go up and the teacher goes to help them. (Teacher 43, Period 06)

Accomplishing teaching tasks (as we have delineated them) may be in some respects easier in the homogeneous high-ability class, but we should not let these advantages obscure the demands which also arise. This kind of class may be thought of as presenting opportunities. However, they can be utilized only if the teacher possesses the skills to do so. Meeting the task demands of this type of class thus means to utilize the characteristics of groups of this composition (the generally greater ease in setting the stage, and the higher task-orientation) to (a) maximize the amount of academically engaged time and (b) minimize the intrusion of the needs for social organization upon instruction.

The Homogeneous Low-ability Class

This class offers a sharp contrast to the homogeneous high-ability class. In general, teaching tasks are more difficult at both levels.

First, setting the stage is more difficult because of the lesser motivation and willingness to cooperate. The teacher more frequently has to face behavior which delays or undermines the installation of activities. The greater unwillingness of the students to cooperate (in addition to the generally lower task-orientation) contributes to the

greater amount of inappropriate and disruptive behavior, which makes it difficult to maintain a suitable learning environment.

Second, the generally poorer task-orientation has a negative impact upon teaching tasks at the instructional level. The teacher must expend larger amounts of effort to maintain the involvement of the students in academic activities and frequently has to accept a lower level of student involvement because of the students' tendency to reject high expectations for task orientation.

The following two vignettes illustrate the comparatively greater demands on the teacher concerning teaching tasks on these two levels: maintaining the proper atmosphere for learning and the involvement of students.

Case Study J

> The students are practicing handwriting. The teacher moves up the row, and comments that Amado has a good handwriting, too. Tony and Timmy joke about it. The teacher ignores this. She goes to the board and says, "This is the last letter for today." And she writes a capital "O". Tony and Timmy visit after her presentation. She sits on the table at the front of the room, and says, "If you're finished, put this paper in a very safe place, and tomorrow we'll finish the capital letters." She pauses. Some are doing this; some are not, and she repeats these instructions. Otis says, "Is it time to go?" The teacher says, "It's not even close." Teacher says, "Now take out your spelling words that you copied yesterday." Some students are doing this; some are not. The teacher asks, "How many were absent yesterday?" Four raise their hands. She asks, "How many do not have the paper?" And she finds that there are a number of students who were present and for some reason or another have lost their papers. She tells the students to move together to copy, but

then realizes after asking a second time that there are about 10 who did not have their papers. She says, "Don't move together. I'll just put them on the board. What happened?" She gets several different responses, such as, "It just disappeared, Miss," "The dog ate it." The teacher says, "Let's get quiet." She helps Diane. She says, "Shhh," as Tony continues to talk with Gracie. Two students wait at their desks for the one at the pencil sharpener to finish sharpening his pencil. Tony gets up and pushes in front of all three of these students. He is very rude. The teacher nearby ignores this action, and instead writes words on the board. Tony continues to talk loudly. The teacher says, "Shhh. If I hear talking I'll think you're finished, and give you some more work." Behind her back Tony continues to talk, and he gestures to Robert and Carmen. She tells the students that she hopes this doesn't happen again, referring to the number of students who had misplaced their papers. She says, "The next time I think you'll have to come after school." Tony yells out in dismay at this. The teacher corrects him. She says, "You are disturbing others." The teacher walks over to him, and talks to him. He talks after she turns her back. Robert says something, and the teacher looks straight at him and says, "Shhh." She stares very hard at him. The teacher comments to the class that they have about 20 minutes to work. Tony is watching Diane work. The teacher gestures at him as if she's going to strangle him, and Tony says, "Hey, Miss, watch it." This is a teasing interaction. The teacher says, "You watch it." This interaction gets him started working. Gracie is chewing gum; the teacher sees the gum and tells Gracie, "I don't want to see that gum out of your mouth again." This is the second incident between the teacher and Gracie concerning gum. (Teacher 25, Period 02)

Case Study K

The students are mostly working now. The teacher helps the students who come up to her. When she's tied up

talking with some students, Bodie, Willie, and Vonrae stop working. Greg must have given them a fine; Willie told them to move it, so he could see it to copy it. When the teacher starts circulating, students get back to work better. Again, the noise picks up and the teacher says, "You aren't even working up to next Thursday. About eight of you need a personal conference before every class. Bodie thinks he's Flip Wilson and that's his problem." The noise seems to come and go. The teacher gets upset with Ronnie. She says that she's taught this three times, and she's not going to teach it again, and where was he when she was explaining it to him. She's really frustrated with him, and she tells him that he'll just have to do the best he can. He says that he didn't have a book while the teacher was doing the explanation. But that's no real excuse. Phil's now up at the teacher's desk. He has hardly begun to work. He appears to be looking at the teacher's book -- the teacher doesn't seem to notice. Greg C. gives out some more fines. The teacher tells Benny to turn around and get to work. She tells Ronnie to move to the back of the room since he can't stay on task. She says that tomorrow when the resource teacher gets here, it's going to be fruit-basket turnover and she's going to reassign seats. . . . She tells the students to put the papers in the basket. She notices that some of the students had gotten to Number 3, but some of them did not get very far at all. . . . All of a sudden chaos seems to reign. It looks like fruit-basket turnover already. Some students make long basketball shots into the trashcan. Someone throws a book on the shelf. There's shuffling and all sorts of noise and racket. It's still 5 minutes until the bell. (Teacher 47, Period 3)

One feature of the low-ability homogeneous class is that the teacher must contest with the students concerning the acceptance of the situation as officially defined. The greater unwillingness of the students to accept the official notion of the situation is clearly

illustrated in the above material. We see here a rejection of classroom etiquette and a questioning of the authority of the teacher. This tendency may also contribute to the amount of inappropriate behavior in the low-ability homogeneous classroom. There is a great deal of such behavior, and it takes particularly disruptive and dysfunctional forms. The task-orientation is noticeably lower than in the high-ability homogeneous class. The teacher must expend a larger amount of effort in order to maintain the involvement of the students in academic activities. As if the problems in maintaining instructional activities were not enough, the difficulties associated with the first level of teaching tasks -- setting the stage -- can be so extreme at times that it becomes difficult to even reach the second, or instructional, stage. This is what some teachers may have in mind when they say, "If only I had the opportunity to teach." Even when the teacher can manage to sustain some involvement in academic activities, there is a greater tendency for the students to participate but not in the form prescribed by the teacher. Rather than expending effort to enforce the proper form of participation, teachers frequently accept a less desirable form of participation to maintain involvement in the activity (perhaps at the expense of lowering participation).

Conclusion

This paper reports a beginning effort to understand how teaching tasks vary with differences in group composition. A small subsample of classes was selected from a larger sample of classes which provided for a classroom management and organization study. This subsample was selected according to the dimensions of heterogeneity/homogeneity with respect to ability and class mean ability. It was found that consistent

patterns in the data from the subsample did permit some idea of the contraints on teaching tasks and individuation of three types: the extremely heterogeneous class, the low-ability homogeneous class, and the high-ability homogeneous class. It was found that these types provided a look at the impact of varied group composition on teaching tasks, as those features were initially delineated by the two dimensions of heterogeneity or homogeneity. These classes provided means of encapsulating and comprehending changes in teaching tasks associated with changes in the dimensions of heterogeneity/homogeneity of ability and mean class ability.

Reference Note

1. Evertson, C., Emmer, E., & Clements, B. Report of the methodology, rationale and instrumentation of the Junior High Classroom Organization Study (R&D Rep. No. 6100). Austin: Research and Development Center for Teacher Education, The University of Texas at Austin, 1980.

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Evertson, C. Differences in instructional activities in higher- and lower-achieving junior high English and math classes. Elementary School Journal, 1981, in press.

Table 1

Scores Used in Sample Selection

Teacher Number	Period	Disruptive	Inappropriate	Off-task, Unsanctioned	Dead Time	On-task, Academic	On-task	Residual	CAT Grade Equivalent[1]	CAT Sigma[2]	n
Heterogeneous Average-ability											
03*	05	1.00	2.17	.02	.00	.94	.98	.0268	7.7	14.45	20
06*	05	1.25	3.00	.08	.27	.59	.62	-.4588	8.0	13.89	22
16*	01	1.14	1.57	.01	.00	.87	.98	-.2522	7.9	17.17	22
26*	01	1.00	1.71	.04	.01	.77	.95	-.0003	8.0	15.84	25
28°	03	1.00	1.50	.06	.16	.53	.77	.1742	7.4	12.94	22
Homogeneous High-ability											
21°	02	3.50	4.38	.15	.11	.50	.74	-.1437	9.3	6.87	27
38*	03	1.00	1.00	.03	.02	.91	.93	.1046	13.0	3.35	29
40*	01	1.50	2.75	.09	.00	.66	.89	.3189	11.1	3.62	23
40*	04	1.29	2.14	.08	.00	.87	.87	.3199	10.9	2.50	27
43°	06	1.25	3.25	.09	.00	.67	.82	-.1519	12.4	5.49	29

Table 1, Continued

Teacher Number	Period	Disruptive	Inappropriate	Off-task, Unsanctioned	Dead Time	On-task, Academic	On-task	Residual	CAT Grade Equivalent[1]	CAT Sigma[2]	n
Homogeneous Low-ability											
02*	04	1.00	2.88	.04	.05	.74	.91	.0240	3.9	4.89	17
25*	02	1.63	2.38	.03	.02	.65	.95	.0789	2.6	4.06	16
32*	02	1.33	1.17	.06	.08	.74	.86	.0164	4.2	5.46	14
41°	03	1.14	1.43	.08	.21	.56	.68	-.1182	5.8	4.19	23
47°	03	[illegible]	3.29	.09	.19	.59	.72	-.2570	4.8	5.30	14

[1]California Achievement Test (pretest measure) grade equivalency (only approximate as converting class average with table for single scores).

[2]California Achievement Test standard deviation of student scores (used to determine heterogeneity and homogeneity).

*English

°Math